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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|---|-------------|----------------------|-----------------------------|------------------|
| 10/756,980 | 01/13/2004 | Joseph F. Petolino | 50,518A DIV2 | 4550 |
| 25212 7590 06/07/2007 DOW AGROSCIENCES LLC 9330 ZIONSVILLE RD INDIANAPOLIS, IN 46268 | | | EXAMINER MEHTA, ASHWIN D | |
| | | | ART UNIT | PAPER NUMBER |
| | | | 1638 | |
| | | | MAIL DATE | DELIVERY MODE |
| | | | 06/07/2007 | PAPER |

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

| | | | |
|------------------------------|--------------------------------------|--|--|
| Office Action Summary | Application No. 10/756,980 | Applicant(s) PETOLINO ET AL. | |
| | Examiner Ashwin Mehta | Art Unit 1638 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 13 March 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 3 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 3 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. The specification amendments filed November 13, 2007 and the claim amendments filed March 13, 2007 have been entered.
2. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.
3. The objection to the specification for not complying with 37 CFR 1.821-1.825 is withdrawn, in light of the amendments.
4. The objection to the title as not being descriptive of the claimed invention is withdrawn, in light of its amendment.
5. The rejections of claim 8 under 35 U.S.C. 112, 2nd paragraph and 103(a) are moot in light of its cancellation.

Specification

6. The amendment to the abstract is acknowledged. However, the amendment appears to contain a typographical error. Text remains at the end of the paragraph (“ormable by other techniques.”) that should be deleted.

Claim Rejections - 35 USC § 103

7. Claim 8 remains rejected under 35 U.S.C. 103(a) as being unpatentable over Bagnall et al. (WO 94/28148, published December 8, 1994) in combination with Ram et al. (Plant Cell Tiss. Org. Cult., 1985, Vol. 4, pages 241-248), for the reasons of record stated in the Office action mailed July 12, 2006. Applicants traverse in the papers filed November 13, 2006. Applicants' arguments were fully considered but were not persuasive.

Applicants argue that Bagnall uses Type III callus, whereas rice makes Type I callus only. Applicants draw attention to a passage in Bagnall that discusses Types I-III callus. Applicants argue that Type I callus is compact nodular tissue that would not be expected to be assessable for DNA delivery, and that therefore Type I rice callus for whiskers transformation might be expected to result in transient expression but not the establishment of stably transformed, regenerable cultures. Applicants also argue that Ram et al. is simply a regeneration method and says nothing about whiskers transformation, which can be damaging to tissue morphology, which is important with respect to Type I callus (response, pages 19-20).

However, Bagnall et al. do not state that Type I callus is not expected to be assessable for DNA delivery. Applicants fail to explain why Type I callus is not assessable for DNA delivery, especially since they acknowledge that it might be assessable for DNA delivery by whiskers transformation for transient expression. As pointed out by Applicants, Bagnall et al. teach that plants can be regenerated from embryogenic callus, and Ram et al. teach such a regeneration method for rice embryogenic callus. By asserting that whiskers transformation can be damaging to tissue morphology, Applicants appear to be suggesting that the regeneration method of Ram et al. may not be amenable to tissue damaged during the whiskers transformation procedure.

Art Unit: 1638

However, the transformation of rice embryogenic callus by particle bombardment, which is a transformation method that also can be damaging to tissues, and the regeneration of transgenic plants from the transformed callus is well documented in the prior art. Applicants have not provided evidence that the method of Ram et al. would fail with embryogenic rice callus cultures that contain DNA introduced by the whiskers transformation method taught by Bagnall et al.

Contact Information

Any inquiry concerning this or earlier communications from the Examiner should be directed to Ashwin Mehta, whose telephone number is 571-272-0803. The Examiner can normally be reached from 8:00 A.M to 5:30 P.M. If attempts to reach the Examiner by telephone are unsuccessful, the Examiner's supervisor, Anne Marie Grunberg, can be reached at 571-272-0975. The fax phone numbers for the organization where this application or proceeding is assigned are 571-273-8300. Patent applicants with problems or questions regarding electronic images that can be viewed in the Patent Application Information Retrieval system (PAIR) can now contact the USPTO's Patent Electronic Business Center (Patent EBC) for assistance. Representatives are available to answer your questions daily from 6 am to midnight (EST). The toll free number is (866) 217-9197. When calling please have your application serial or patent number, the type of document you are having an image problem with, the number of pages and the specific nature of the problem. The Patent Electronic Business Center will notify applicants of the resolution of the problem within 5-7 business days. Applicants can also check PAIR to confirm that the problem has been corrected. The USPTO's Patent Electronic Business Center is a complete service center supporting all patent business on the Internet. The USPTO's PAIR system provides Internet-based access to patent application status and history information. It also enables applicants to view the scanned images of their own application file folder(s) as well as general patent information available to the public. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>.

For all other customer support, please call the USPTO Call Center (UCC) at 800-786-9199.

May 31, 2007



Ashwin D. Mehta, Ph.D.
Primary Examiner
Art Unit 1638